

# Recommendations Regarding Developing an Operating Plan Guidance Document

## Introduction

The *Municipal Wastewater Regulation (MWR)* and Amendments provide requirements that, if met by dischargers of municipal effluent or providers of reclaimed water, will ensure that their activity is not prohibited by sections 6 (2) and 6 (3) of the *Environmental Management Act*. In other words, compliance with the MWR provides authorization for a discharge of municipal effluent or use of reclaimed water in British Columbia.

## Operating Plan

In order to meet the requirements of Division 4 of the Municipal Wastewater Regulation the discharger must develop an operating plan for the wastewater facilities. The attached operating plan outline is meant to provide guidance to the qualified professional when preparing an operating plan for a specific wastewater facility.

## General

Operating plans must be developed by qualified professionals. When developing and implementing operating plans, qualified professionals are advised to:

- draw on knowledge of, or experience with, existing successful operating plans;
- refer to appropriate industry benchmarking standards;
- consult with experienced operators familiar with the operation of the facility;
- build mechanisms for continual improvement of the operating plan. For example, the operating plan, including an emergency component, should be regularly tested and evaluated, and improved accordingly.

## Operating Plan Outline

### Facility Certification

This section should:

- provide details of the how and when the facility will be certified by the Environmental Operators Certification Program;
- describe a program for re-assessing the plant certification level regularly; and
- outline the steps necessary to re-certify the facility following any modifications to the facility.

## **Operator Certification**

This section should describe:

- the appropriate operator certification level(s) necessary to operate and maintain the facility consistent with its classification;
- provisions to ensure that at least one certified operator is available at all times; and
- recruitment and replacement procedures designed to ensure that a certified operator responsible for the facility is employed.

## **Operation and Maintenance**

This section should describe:

- the facility's operator's manual and make provision for its continual improvement;
- a comprehensive planned maintenance program which includes:
  - a list of authorized service agents;
  - an inventory of facility components and authorized replacement parts;
  - detailed description of inspection, repair and replacement frequency for facility components;
- measures to ensure that the facility is operated at all times within specifications and in a manner to ensure compliance with the effluent quality standards of the regulation;
- any automated systems, alarms and warning devices to alert operators to problems; and
- if the facility is supplying reclaimed water for use on vegetation, the appropriate application rates.

## **Emergency Procedures**

This section should:

- describe all built-in redundancy features of the facility;
- outline measures to prevent emergency conditions from occurring;
- describe measures to mitigate any health or environmental impact, if emergencies occur;
- make specific reference to the Spill Reporting Regulation; and
- provide specific instructions for staff in the event of an emergency including contact information for local authorities (fire, police, public health), the Provincial Emergency Program and the Regional Environmental Protection Manager.

## **Facility Monitoring**

This section should describe:

- operating and effluent quality data collection, analysis and review procedures;

- calibration procedures for monitoring equipment;
- appropriate response to alarm conditions;
- any on-line monitoring and PLC feature; and
- continuous improvement systems.

### **Staff Competency**

This section should:

- describe a training plan for all facility staff;
- identify a continuous improvement approach to staff competency; and
- ensure that resources are in place to provide ongoing training and upgrading of staff skills, especially to prepare for any facility modifications.

### **Confirmation that Operating Plan is Adequate for the Design of the Facility**

This section should:

- provide for a signed statement from the qualified professional who designed the facility and the qualified professional who prepared the operating plan that the operating plan is consistent with the specifications of the facility and is adequate to ensure its reliable operation and maintenance.

### **Disclaimer**

This guidance document does not replace the Environmental Management Act or its regulations. It does not list all provisions relating to municipal sewage discharges. If there are differences or omissions in this document, the act and regulations apply.